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Substitute for form 1449/PTO		Complete if Known		
		Application Number	10/730,628	
INFORMA	ATION DISCLOSURE	Filing Date	12/08/2003	
		First Named Inventor	Lange	
	ENT BY APPLICANT	Art Unit	1	
(Use as many sheets as necessary)		Examiner Name		
Sheet 2	01 4	Attorney Docket Number	DIE0008.02	

Examiner	Cite	te Document Number Publication		ATENT DOCUMENTS  n Date Name of Patentee or	Pages California III		
Number-Kind Code <sup>2 (J In</sup>	Number-Kind Code <sup>2 (I Incur)</sup>	MM-DD-YYYY	Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear			
51		<sup>US-</sup> 5,812,068	09-22-1998	Wisler et al.			
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		FORE	<b>IGN PATENT DOCU</b>	MENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines,	Γ
Country Code <sup>3</sup> Number <sup>4</sup> 'Kind Code <sup>3</sup> (if known)	MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages Or Relevant Figures Appear	7		
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Translation is attached.

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				Art Unit	
(Use as many sheets as necessary)			ecessary)	Examiner Name	·
Sheet	3	of	4	Attorney Docket Number	DIE0008.02

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
90		"Disc Springs", undated, 1 page	
		"General Fundamentals: Rolling Bearing Types", undated, pages 1-13	
		"Mutually-Opposed Springs", undated, page 15	
		Boart Longyear Company, "Environmental Drilling Division: Sonic Drilling", undated, 12 pages	
		"Sonic Drilling Ltd.: Industry in Action", undated, 2 pages	
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		ResonantSonic Drilling - Innovative Technology Summary Report*, U.S. Department of Energy - Office of Environmental Management - Office of Technology Development, (Online)	
		April1995, Retrieved from the Internet: http://www.em.doe.gov/plumesfa/intech/rsd/index.html (retrieved on 7-4-02)	
00		Copy of International Search Report in Corresponding International Application, dated July 12, 2002, 2 pages	

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STATEMENT BY APPLICANT	First Named Inventor	Lange	
	Art Unit		
(Use as many sheets as necessary)	Examiner Name		
Sheet 4 ' of 4	Attorney Docket Number	DIE0008.02	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
93		Copy of Supplemental International Search Report in corresponding International Application, dated September 25, 2002, 3 pages	
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Sheet 1

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Application Number	10/730,628	_			
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Examiner	Cite	Document Number	Publication Date	TOCUMENTS	
Initials*	No.1	Number-Kind Code <sup>2 (7 known)</sup>	MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevan Figures Appear
<del>4</del> 2	ļ	<sup>US-</sup> 1,763,146	06-10-1930	Goodwin	
_/		<sup>US-</sup> 2,743,585	05-01-1956	Berthet et al.	<del>                                     </del>
		<sup>US-</sup> 3,190,369	06-22-1965	Pyles	
		<sup>US-</sup> 3,217,551	11-16-1965	Bodine Jr.	<del> </del>
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1		<sup>US-</sup> 4,023,628	05-17-1977	Bodine	
+		US- 4,217,753	08-19-1980	Loretan	
		<sup>US-</sup> 4,403,665	09-13-1983	Bodine	
		<sup>US-</sup> 4,662,459	05-05-1987	Bodine	<del>                                     </del>
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$\rightarrow$		<sup>US-</sup> 4,809,790	03-07-1989	Manchak, Jr.	<del> </del>
-+-		US- 5,027,908	07-02-1991	Roussy	
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-		US- 5,417,673	05-23-1995	Gordon	<del> </del>
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	$\rightarrow$	us- 5,549,170	08-27-1996	Barrow	
ナノ		<sup>US-</sup> 5,562,169	10-08-1996	Barrow	

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	Т
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2		SU 1078018	03-07-1984	Gold Rare		ŧ.
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Date Signature Considered

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